**A Mix-Up at the Hospital - Student Activity**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**On June 6 at approximately 1:00 p.m., Mrs. Smith, Mrs. Stevenson, and Mrs. Jones each delivered a healthy baby boy at Metropolitan General Hospital. At 1:20 p.m., the hospital's fire alarm sounded. Nurses and orderlies scrambled to evacuate patients, and the three new babies were rushed to safety. After the danger had passed, the hospital staff was distressed to find that in the confusion, they had forgotten which baby was which! Since the babies were rescued before receiving their identification bracelets, there was no easy way to identify them. Dr. Anne Robinson, head of pediatrics, ordered that DNA typing be performed on the babies and their parents.**

**Your job is to decide which baby belongs to which set of parents.**

**To assign a baby to a set of parents, every band in the baby's profile should match a band from either the mother or the father. Not all of the bands in the mother's or father's profiles will have a counterpart in the baby's DNA profile. Hint: Use a ruler or a straightedge to help you line up the bands.**

1. **Which baby belongs to which couple?** 
   1. **Smith’s baby- \_\_\_\_\_\_\_#**
   2. **Stevenson’s baby- \_\_\_#**
   3. **Jones’s baby- \_\_\_\_\_\_\_#**
2. **Show which bands each baby inherited from its mother and from its father by marking the bands M and F.**

**Figure 25.1 DNA profile data from the Smith, Stevenson, and Jones parents and the three infants.**